



State of New Hampshire  
DEPARTMENT OF ENVIRONMENTAL SERVICES  
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August 25, 2000

Mr. George Weeks  
Corporate Environmental Manager  
Aavid Thermal Products, Inc.  
One Kool Path, P.O. Box 400  
Laconia, New Hampshire 03247-0400

**SUBJECT: RECYCLING OF SPENT CAUSTIC SOLUTION**

Dear Mr. Weeks:

The New Hampshire Department of Environmental Services, Waste Management Division has received your letters dated April 6, 2000 and August 11, 2000 and your fax dated August 22, 2000 documenting your claim that spent caustic solution from the Aavid Precision Extrusion (Aavid) plant in Franklin, New Hampshire that is to be shipped to Holland Company, Incorporated (Holland) in Adams, Massachusetts for recycling is exempt from regulation under the New Hampshire Hazardous Waste Rules (Env-Wm 100-1000). Your letters and fax, as well as several related letters from Holland, are in response to our July 27, 1999 letter and e-mail correspondence to you on this subject. Based upon further review of the information you have submitted and the New Hampshire Hazardous Waste Rules, we offer the following:

In our July 27, 1999 letter we acknowledged that it may be possible for your spent caustic solution to meet the classification of "not a waste when recycled" as stated in Env-Wm 803.04(a), but that more information on the material and the proposed management of it would need to be provided for our review before we could make this determination. Specifically, our letter stated that before the material can be classified as "not a waste when recycled", the following criteria needed to be met:

- (1) Meet relevant commercial specifications for virgin caustic,
- (2) Be as effective as the virgin material for which it is substituted, and
- (3) Be used under controlled conditions.

Your letters, as well as correspondence from Holland, address these criteria. The March 7, 2000 Holland letter addressed to Aavid states that Holland tested the material and "...found it suited for use as received as a substitute for virgin raw materials. The test results were 5.54% Na<sub>2</sub>O and 7.8% Al<sub>2</sub>O<sub>3</sub>." In addition, Holland's March 3, 2000 letter states, "At our plant in Adams liquid sodium aluminate is obtained by digestion of aluminum hydrate in a caustic (sodium hydroxide) water solution. The material you produce (i.e., spent caustic solution) will be used as received without reprocessing or reclamation as a direct substitute for virgin raw materials in the regular production of sodium aluminate." Furthermore, you submitted a Massachusetts Department of Environmental Protection (MADEP) letter dated February 18, 2000, pertaining to a Hazardous Waste Recycling Permit for Holland. Tod Leedberg of my staff has confirmed with John Downes of MADEP that Holland has a recycling permit that allows Holland to receive spent caustic solution for use in the manufacture of aluminum containing compounds (e.g., liquid sodium aluminate) without the use of a hazardous waste manifest. In addition, your fax of August 22, 2000 states that the spent caustic solution is only a hazardous waste due to corrosivity and could not be considered a hazardous waste for any other reason based on your knowledge of the process. We understand, however, that you will be analyzing the spent caustic solution for TCLP metals and organic compounds to confirm your hazardous waste determination. And finally, a fax from Holland dated August 22, 2000 states that caustic does not have to be added to your solution before Holland uses it to manufacture the end product.

Based upon the statements and documentation you have supplied, we believe that, to the extent that the spent caustic solution is directly used as an ingredient in the production of a new product (e.g., liquid sodium aluminate) without first being reclaimed, the material can be classified as "not a waste when recycled". As such and as far as the State of New Hampshire is concerned, Aavid would not need to use a hazardous waste manifest or a registered New Hampshire hazardous waste transporter to deliver the spent caustic solution to the Holland Company for recycling, but would remain subject to any applicable U.S. Department of Transportation or New Hampshire Department of Safety transportation regulations. Aavid would still need to maintain documentation of claims that the spent caustic solution is not a waste, as per Env-Wm 803.05, and remain in compliance with the Env-Wm 811 Speculative Accumulation requirements.

This determination is made under the condition that the information provided by Aavid relating to the physical and chemical nature of the material, its source, and the proposed disposition and processing is true and accurate. Inaccuracies or changes in any of the stated facts could alter the Department's determination. For instance, per Env-Wm 803.03(b), if the spent caustic solution is reclaimed before recycling, used in a manner constituting disposal, or used to produce products that are applied to the land, burned for energy recovery, accumulated speculatively, or inherently waste-like, then the spent caustic solution would be deemed to be a waste when recycled and therefore subject to regulation under the Hazardous Waste Rules.

We regret the length of time taken to finalize this letter of concurrence on your recycling proposal but believe a careful review of all of the issues involved was required for the benefit of Aavid and the Department. The Department has committed, and hopes to continue to commit, significant resources through the Performance Partnership Agreement with EPA to deal with waste reduction and pollution prevention issues with the goal to benefit New Hampshire's business community while protecting human health and the environment. If you have any questions on this letter, please feel free to call Tod G. Leedberg, Waste Management Specialist, or me at (603)271-2942. A current set of the State of New Hampshire Hazardous Waste Rules can be obtained from the Department's website at <http://www.des.state.nh.us/hwrb/hwrules.pdf>, or by contacting the Public Information and Permitting Office at (603)271-2975.

Sincerely,

John J. Duclos, Supervisor  
Hazardous Waste Compliance Section  
Waste Management Division

cc: DB/RCRA/RPB  
Kenneth W. Marschner, DES  
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